

CLAIMS

WHAT IS CLAIMED IS:

1. A method for transmitting assistance location information to a plurality of telemetry devices over a two-way wireless network, the method comprising:
generating the assistance location information from a location reference network within the wireless network; and
broadcasting the assistance location information to the plurality of telemetry devices over the wireless network,
wherein the telemetry devices are configured to determine respective locations of the telemetry devices independently from the location reference network when out of coverage of the wireless network.
2. A method according to claim 1, wherein the wireless network is a two-way paging system, and the assistance location information is Assisted-Global Positioning System (A-GPS) data.
3. A method according to claim 2, wherein the broadcasting step is performed based upon a schedule.
4. A method according to claim 2, the method further comprising:
receiving a request for new assistance location information from one of the telemetry devices;
and
transmitting over a point-to-point channel of the wireless network a response containing the new assistance location information to the one telemetry device.

5. A method according to claim 1, wherein the plurality of the telemetry devices are within a common zone among a plurality of zones within the wireless network.

6. A system for transmitting assistance location information to a plurality of telemetry devices over a two-way wireless network, the system comprising:
a location server configured to generate the assistance location information from a location reference network within the wireless network; and
a messaging server configured to broadcast the assistance location information to the plurality of telemetry devices over the wireless network,
wherein the telemetry devices are configured to determine respective locations of the telemetry devices independently from the location reference network when out of coverage of the wireless network.

7. A system according to claim 6, wherein the wireless network is a two-way paging system, and the assistance location information is Assisted-Global Positioning System (A-GPS) data.

8. A system according to claim 7, wherein the messaging server broadcasts the assistance location information based upon a schedule.

9. A system according to claim 7, wherein the location server receives a request for new assistance location information from one of the telemetry devices and generates a response containing the new assistance location information to the one telemetry device, the messaging server transmitting the response over a point-to-point channel of the wireless network.

10. A system according to claim 6, wherein the plurality of the telemetry devices are within a common zone among a plurality of zones within the wireless network.

11. A computer-readable medium carrying one or more sequences of one or more instructions for transmitting assistance location information to a plurality of telemetry devices over a two-way wireless network, the one or more sequences of one or more instructions including instructions which, when executed by one or more processors, cause the one or more processors to perform the steps of:

generating the assistance location information from a location reference network within the wireless network; and
broadcasting the assistance location information to the plurality of telemetry devices over the wireless network,
wherein the telemetry devices are configured to determine respective locations of the telemetry devices independently from the location reference network when out of coverage of the wireless network.

12. A computer-readable medium according to claim 11, wherein the wireless network is a two-way paging system, and the assistance location information is Assisted-Global Positioning System (A-GPS) data.

13. A computer-readable medium according to claim 12, wherein the broadcasting step is performed based upon a schedule.

14. A computer-readable medium according to claim 12, further including instructions for causing the one or more processors to perform the steps of:
receiving a request for new assistance location information from one of the telemetry devices;
and
initiating transmission, over a point-to-point channel of the wireless network, of a response containing the new assistance location information to the one telemetry device.

15. A computer-readable medium according to claim 11, wherein the plurality of the telemetry devices are within a common zone among a plurality of zones within the wireless network.

16. A method for obtaining assistance location information over a two-way wireless network for tracking an object, the method comprising:

transmitting a request for assistance location information to a location server over the wireless network, wherein the location server generates the assistance location information from a location reference network within the wireless network;
receiving a response from the location server over a point-to-point channel of the wireless network, the response containing the location assistance information; and
periodically receiving a broadcast message from the location server, the broadcast message including new assistance location information.

17. A method according to claim 16, wherein the wireless network is a two-way paging system, and the assistance location information is Assisted-Global Positioning System (A-GPS) data.

18. A method according to claim 17, further comprising:
determining location of the object based on location information obtained independently from the location server.

19. A method according to claim 17, wherein the broadcast message in the receiving step is received based upon a schedule.

20. An apparatus for obtaining assistance location information over a two-way wireless network, the method comprising:

means for transmitting a request for assistance location information to a location server over the wireless network, wherein the location server generates the assistance location information from a location reference network within the wireless network;
means for receiving a response from the location server over a point-to-point channel of the wireless network, the response containing the location assistance information; and
means for periodically receiving a broadcast message from the location server, the broadcast message including new assistance location information.

21. An apparatus according to claim 20, wherein the wireless network is a two-way paging system, and the assistance location information is Assisted-Global Positioning System (A-GPS) data.

22. An apparatus according to claim 21, further comprising:
means for determining location of the object based on location information obtained independently from the location server.

23. An apparatus according to claim 21, wherein the broadcast message is received based upon a schedule.